

## Patent claims

1. A method for adjusting a ringing signal current in a subscriber line (106), a ringing signal generator (114) which generates the ringing signal being connected to one end of the subscriber line (106) and at least one subscriber (102) being connected to another end of the subscriber line (106), comprising the following steps:
  - 5 - detecting a ringing signal current of the ringing signal;
  - comparing the detected ringing signal current with a predetermined current value; and
  - when the detected ringing signal current is greater than the predetermined current value, reducing a ringing signal voltage of the ringing signal in such a manner that the ringing signal current is equal to the predetermined current value, the ringing signal voltage being dropped across the subscriber line (106) and a load of the at least one subscriber (102).
- 10 2. The method as claimed in claim 1, wherein the step of comparing also exhibits the following steps:
  - 15 - comparing the detected ringing signal current with stored current values which are associated with stored voltage values of the ringing signal voltage; and
  - setting the ringing signal voltage in accordance with the stored voltage values, in such a manner that the ringing signal current is equal to the predetermined current value.
- 20 3. The method as claimed in claim 1 or 2, wherein the step of comparing the detected ringing signal current with a predetermined current value is

carried out periodically or once per ringing signal.

4. The method as claimed in claim 1, 2 or 3, wherein  
5 the method also exhibits the following step:
  - setting a supply voltage of the ringing signal generator (114) in dependence on the ringing signal voltage.
- 10 5. A circuit arrangement which is connected to one end of a subscriber line (106), at least one subscriber (102) being connected to another end of the subscriber line (106), comprising the following features:
  - a ringing signal generator (114) which generates a ringing signal and is connected to the subscriber line (106); and
  - a host controller (110) which controls the ringing signal generator (114) and carries out  
20 the method as claimed in one of claims 1 to 4.
- 25 6. The circuit arrangement as claimed in claim 5, wherein the circuit arrangement also exhibits a memory (122) in which the current values, which are compared with the detected ringing signal current, and the associated voltage values for adjusting the ringing signal voltage, are stored.
- 30 7. The circuit arrangement as claimed in claim 5 or 6, wherein the circuit arrangement also exhibits a DC/DC converter (124) which is controlled by the host controller (110) and which converts an external supply voltage into the supply voltage of the ringing signal generator (114) in dependence  
35 on the ringing signal voltage.

8. The circuit arrangement as claimed in claim 5, 6 or 7, wherein the circuit arrangement also exhibits an interface circuit (104) which is connected to the subscriber line (106) and to the host controller (110) and is controlled by the host controller (110) in order to detect the ringing signal current of the ringing signal.  
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9. The circuit arrangement as claimed in claim 8, wherein the interface circuit (104) exhibits the ringing signal generator (114) and the DC/DC converter (124) sets a supply voltage of the interface circuit (104) in dependence on the ringing signal voltage.  
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10. The circuit arrangement as claimed in one of claims 5 to 9, wherein the circuit arrangement is a line card (100).  
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